

UTAH OIL AND GAS CONSERVATION COMMISSION

REMARKS: WELL LOG _____ ELECTRIC LOGS _____ FILE ☒ WATER SANDS _____ LOCATION INSPECTED _____ SUB REPORT/abd. _____

DATE FILED 8-21-89

LAND: FEE & PATENTED

STATE LEASE NO.

PUBLIC LEASE NO. U-28203

INDIAN

DRILLING APPROVED: 9-22-89 (CAUSE NO. 197-4)

SPUDDED IN:

COMPLETED: 10-18-91 LA PUT TO PRODUCING:

INITIAL PRODUCTION:

GRAVITY A.P.I.

GOR:

PRODUCING ZONES:

TOTAL DEPTH:

WELL ELEVATION:

DATE ABANDONED: BLM DID NOT APPROVE-LA'D 10-18-91 APD EXPIRED

FIELD: NATURAL BUTTES

UNIT:

COUNTY: UINTAH

WELL NO. HILL CREEK FED. 1-28

API NO. 43-047-31876

LOCATION 605' FNL FT. FROM (N) (S) LINE. 1615' FWL

FT. FROM (E) (W) LINE. NENW

1/4 - 1/4 SEC.

28

TWP.

RGE.

SEC.

OPERATOR

TWP.

RGE.

SEC.

OPERATOR

10S

20E

28

SANTA FE ENERGY COMPANY

Santa Fe Energy Company



Central Division-Mid Continent District
Williams Center Tower One
Suite 500
One West Third Street
Tulsa, Oklahoma 74103
918/582-6944

July 18, 1989

Bureau of Land Management

RE: Hill Creek Federal #1-28
NW/4 of Sec.28, T10S, R20E
Unitah County, Utah

Gentlemen:

This letter is to inform you that Permitco Inc. is authorized to act as Agent and to sign documents on behalf of Santa Fe Energy Co. when necessary for filing county, state and federal permits including Onshore Order No. 1, Right-Of-Way applications, etc., for the above mentioned well(s).

It should be understood that Permitco Inc. is acting as Agent only in those matters stated above and is not responsible for drilling, completion, production or compliance with regulations.

Santa Fe Energy Co. agrees to accept full responsibility for operations conducted in order to drill, complete and produce the above-mentioned well(s).

Sincerely,

Sammy N. Morgan
Sr. Drilling Engineer

SNM:c1



STATE OF UTAH
 DEPARTMENT OF NATURAL RESOURCES
 DIVISION OF OIL, GAS, AND MINING

(Other instructions on reverse side)

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work
 DRILL ☒ DEEPEN ☐ PLUG BACK ☐

b. Type of Well
 Oil Well ☐ Gas Well ☒ Other ☐ Single Zone ☒ Multiple Zone ☐

2. Name of Operator 918/582-6944 One West Third Street, Suite 500
 Santa Fe Energy Company Tulsa, OK 74103

3. Address of Operator 303/452-8888 13585 Jackson Drive
 Permitco Inc. - Agent Denver, CO 80241

4. Location of Well (Report location clearly and in accordance with any State requirements.)*
 At surface 605' FNL and 1615' FWL
 At proposed prod. zone NE NW

5. Lease Designation and Serial No. U-28203

6. If Indian, Allottee or Tribe Name N/A

7. Unit Agreement Name N/A

8. Farm or Lease Name Hill Creek Federal

9. Well No. #1-28

10. Field and Pool, or Wildcat Hill Creek Natural Buttes (630)

11. Sec., T., R., M., or Blk. and Survey or Area Sec. 28, T10S - R20E

12. County or Parrish Uintah 13. State Utah

14. Distance in miles and direction from nearest town or post office* 13 miles southwest of Ouray, Utah

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drlg. line, if any) 299'

16. No. of acres in lease 1880

17. No. of acres assigned to this well 160

18. Distance from proposed location* to nearest well, drilling, completed, or applied for, on this lease, ft. none

19. Proposed depth 9000' *Mesa Verde*

20. Rotary or cable tools Rotary

21. Elevations (Show whether DF, RT, GR, etc.) 5089' GR

22. Approx. date work will start* September 1, 1989 or upon approval of this application

Size of Hole	Size of Casing	Weight per Foot	Setting Depth	Quantity of Cement
17-1/2"	13.375"	54.5#	325'	350 sx or suffic to circ to surf.
* 12-1/4"	8-5/8"	24 & 28#	3500'	300 sx
7.875"	5-1/2"	17#	9000'	350 sx or suffic to cover zones of interest.

* Intermediate string will be run only if water flow is encountered at 3050'.

Santa Fe Energy Company proposes to drill a well to 9000' to test the Wasatch and Mesa Verde Formations. If productive, casing will be run and the well completed. If dry, the well will be plugged and abandoned as per BLM and State of Utah requirements.

See Onshore Order No. 1 attached.

Santa Fe Energy Company is authorized by proper lease interest owners to conduct operations on the above mentioned lease. Bonding will be provided by the Operator, Santa Fe Energy Company.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24. Signed *Greg L. Smith* Consultant for Santa Fe Energy Company Title Date 8/16/89

(This space for Federal or State office use)

Permit No. 43-047-31876

Approval Date

APPROVED BY THE STATE
 OF UTAH DIVISION OF
 OIL, GAS, AND MINING

Approved by

Title

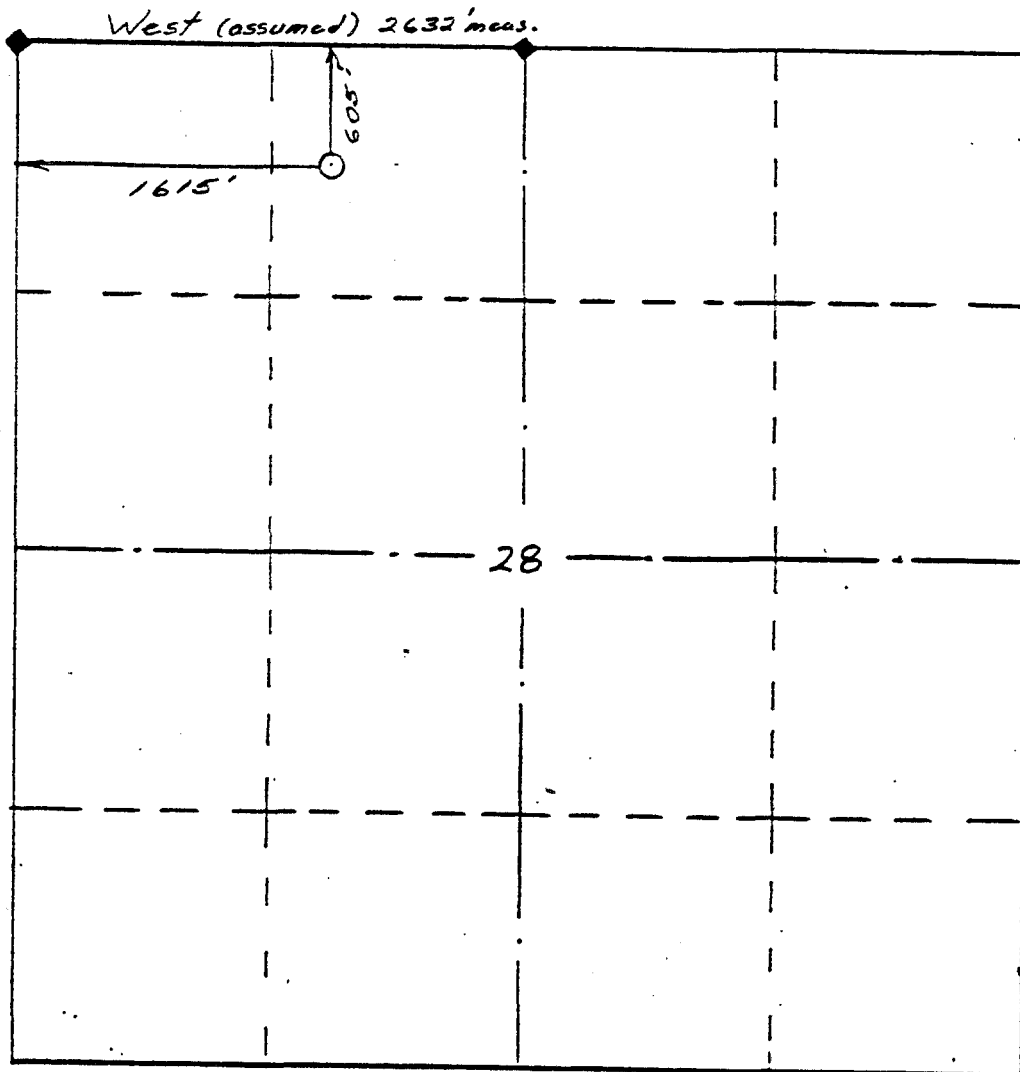
DATE: 9-22-89

Conditions of approval, if any:

BY: *John R. Daza*

WELL SPACING: 197/4

WELL LOCATION AND ACREAGE DEDICATION PLAT



1"=1000'

WELL LOCATION DESCRIPTION:

Santa Fe Energy Company, Hill Creek Federal 1-28

605 'FNL & 1615 'FWL

Section 28, T.10 S., R.20 E. SLM

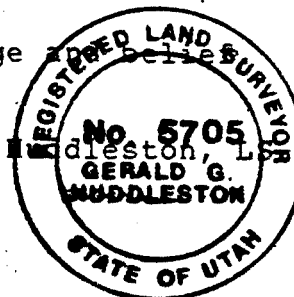
Uintah County, UT

5089 ' ground elevation

The above plat is true and correct my knowledge and belief

24 July 1989

Gerald G. Muddleston, L.S.



ONSHORE OIL & GAS ORDER NO. 1

Approval of Operations on Onshore
Federal and Indian Oil & Gas Leases

HILL CREEK FEDERAL #1-28
605' FNL and 1615' FWL
NE NW Section 28, T10S - R20E
Uintah County, Utah

Prepared For:

SANTA FE ENERGY COMPANY

By:

PERMITCO INC.
13585 Jackson Drive
Denver, Colorado 80241
303/452-8888

Copies Sent To:

- 4 - BLM - Vernal, Utah
- 1 - BIA - Ft. Duchesne, Utah
- 1 - Division of Oil, Gas & Mining, SLC, Utah
- 2 - Santa Fe Energy Company - Tulsa, OK
- 1 - Ron Muir.- Duchesne, Utah



Permitco Incorporated
A Petroleum Permitting Company

ONSHORE ORDER NO. 1
Santa Fe Energy Company
Hill Creek Federal No. 1-28
605' FNL and 1615' FWL
NE NW Sec. 28, T10S - R20E
Uintah County, Utah

DRILLING PROGRAM

ONSHORE OIL & GAS ORDER NO. 1
Approval of Operations on Onshore
Federal and Indian Oil and Gas Leases

1. The estimated tops of important geologic markers are as follows:

<u>Formation</u>	<u>Depth</u>	<u>Subsea</u>
Uintah	Surface	
Green River	1,500'	+3,600'
Wasatch	4,350'	+ 750'
Chapita Wells Member	5,010'	- 90'
Uteland Butte Member	6,010'	- 910'
Mesa Verde	7,320'	-2,220'
T.D.	9,000'	-3,900'

2. a. The estimated depths at which the top and bottom of the anticipated water, oil, gas or other mineral bearing formations are expected to be encountered are as follows:

<u>Substance</u>	<u>Formation</u>	<u>Depth</u>
Gas	Wasatch	4,350'
Gas	Mesa Verde	7,320'-T.D.

All shows of fresh water and minerals will be reported and protected.

3. Santa Fe Energy Company's minimum specifications for pressure control equipment are as follows:

Ram Type: 10" Hydraulic double, 3000 psi w.p.

Ram type preventers and associated equipment shall be tested to approved stack working pressure if isolated by test plug or to 70 percent of internal yield pressure of casing. Pressure shall be maintained for at least 10 minutes or until requirements of test are met, whichever is longer. If a test plug is utilized, no bleed-off pressure is acceptable. For a

ONSHORE ORDER NO. 7
Santa Fe Energy Company
Hill Creek Federal No. 1-28
605' FNL and 1615' FWL
NE NW Sec. 28, T10S - R20E
Uintah County, Utah

DRILLING PROGRAM

3. BOP Equipment (cont.)

test not utilizing a test plug, if a decline in pressure of more than 10 percent in 30 minutes occurs, the test shall be considered to have failed. Valve on casing head below test plug shall be open during test of BOP stack.

Annular type preventers shall be tested to 50 percent of rated working pressure. Pressure shall be maintained at least 10 minutes or until provisions of test are met, whichever is longer.

As a minimum, the above test shall be performed:

- a. when initially installed;
- b. whenever any seal subject to test pressure is broken
- c. following related repairs; and
- d. at 30-day intervals

Valves shall be tested from working pressure side during BOPE tests with all down stream valves open.

When testing the kill line valve(s) the check valve shall be held open or the ball removed.

Annular preventers shall be functionally operated at least weekly.

Pipe and blind rams shall be activated each trip, however, this function need not be performed more than once a day.

A BOPE pit level drill shall be conducted weekly for each drilling crew.

Pressure tests shall apply to all related well control equipment.

All of the above described tests and/or drills shall be recorded in the drilling log.

The choke manifold, BOP extension rods and handwheels will be located outside the substructure. The hydraulic BOP closing unit will be located at least 100 feet from the well head, with the remote control unit on the rig floor. The casing head and BOP will be flanged 11" 3000 psi w.p. Kill line will

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Santa Fe Energy Company
Hill Creek Federal No. 1-28
605' FNL and 1615' FWL
NE NW Sec. 28, T10S - R20E
Uintah County, Utah

DRILLING PROGRAM

4. Casing and Cementing Program (cont.)

- b. Casing design shall assume formation pressure gradients of 0.44 to 0.50 psi per foot for exploratory wells (lacking better data).
- c. Casing design shall assume fracture gradients from 0.70 to 1.00 psi per foot for exploratory wells (lacking better data)
- d. Casing collars shall have a minimum clearance of 0.422 inches of all sides in the hole/casing annulus, with recognition that variances can be granted for justified exceptions.
- e. All waiting on cement times shall be adequate to achieve a minimum of 500 psi compressive strength at the casing shoe prior to drilling out.
- f. All casing except the conductor casing, shall be new or reconditioned and tested used casing that meets or exceeds API standards for new casing.
- g. The surface casing shall be cemented back to surface either during the primary cement job or by remedial cementing.
- h. All indications of usable water shall be reported to the authorized officer prior to running the next string of casing or before plugging orders are requested, whichever occurs first.
- i. Surface casing shall have centralizers on every fourth joint of casing starting with the shoe joint and up to the bottom of the cellar.
- j. Top plugs shall be used to reduce contamination of cement by displacement fluid. A bottom plug or other acceptable technique, such as a suitable preflush fluid, inner string cement method, etc. shall be utilized to help isolate the cement from contamination by the mud fluid being displaced ahead of the cement slurry.
- k. All casing strings below the conductor shall be pressure tested to 0.22 psi per foot of casing string length or 1500 psi, whichever is greater, but not to exceed 70 percent of the minimum internal yield. If pressure declines more than 10 percent in 30 minutes, corrective action shall be taken.

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Santa Fe Energy Company
Hill Creek Federal No. 1-28
605' FNL and 1615' FWL
NE NW Sec. 28, T10S - R20E
Uintah County, Utah

DRILLING PROGRAM

4. Casing and Cementing Program (cont.)

1. On all exploratory wells, and on that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.

- m. The proposed casing program will be as follows:

<u>Purpose</u>	<u>Depth</u>	<u>Hole Size</u>	<u>O.D.</u>	<u>Weight</u>	<u>Grade</u>	<u>Type</u>	<u>New or Used</u>
Surface	0-325'	17-1/2"	13.375"	54.5#	K-55	ST&C	New
Intermed.	0-2500'*	12-1/4"	8-5/8"	24#	K-55	ST&C	New
Intermed.	2500-3500'	12-1/4"	8-5/8"	28#	S-80	ST&C	New
Produc.	0-9000'	7.875"	5-1/2"	17#	N-80	LT&C	New

*This string will be run only if water flow is encountered at 3050'.

- n. Casing design subject to revision based on geologic conditions encountered. All casing strings to be tested to 0.2 psi/ft. or 1000 psi, whichever is greater.

- o. The cement program will be as follows:

<u>Surface</u> 0-325'	<u>Type and Amount</u> + 350 sx Class "G" w/2% CaCl ₂ + 1/4 pps Flocele or sufficient to circulate to surface.
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<u>Intermediate</u>	<u>Type and Amount</u> + 300 sx Class "G" w/2% CaCl ₂ + 1/4 pps flocele.
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<u>Production</u> Thru possible pay zones	<u>Type and Amount</u> + 350 sx or sufficient to cover zones of interest.
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Santa Fe Energy Company
Hill Creek Federal No. 1-28
605' FNL and 1615' FWL
NE NW Sec. 28, T10S - R20E
Uintah County, Utah

DRILLING PROGRAM

4. Casing and Cementing Program (cont.)

- p. After cementing but before commencing any test, the casing string shall stand cemented until the cement has reached a compressive strength of at least 500 psi at the shoe, except that in no case shall test be initiated until the cement has been in place at least 12 hours. WOC time shall be recorded in the driller's log.
- q. The following reports shall be filed with the District Manager within 30 days after the work is completed.
 - 1. Progress reports, Form 3160-5 (formerly 9-331) "Sundry Notices and Reports on Wells", must include complete information concerning:
 - a. Setting of each string of casing, showing the size, grade, weight of casing set, hole size, setting depth, amounts and type of cement used, whether cement circulated or the top of the cement behind the casing, depth of cementing tools used, casing test method and results, and the date work was done. Show the spud date on the first reports submitted.
 - b. Temperature or bond logs must be submitted for each well where the casing cement was not circulated to the surface.
- r. Auxillary equipment to be used is as follows:
 - 1. Kelly cock
 - 2. No bit float is deemed necessary.
 - 3. A sub with a full opening valve.

5. a. The proposed circulating mediums to be employed in drilling are as follows:

<u>Interval</u>	<u>Mud Type</u>	<u>Mud Wt.</u>	<u>Visc.</u>	<u>F/L</u>	<u>PH</u>
0-325'	Spud Mud	8.4-9.2	26-32	N/C	9.0
325-4600'	KCL Water	8.4-9.2	28-32	N/C	9.0
4600-T.D.	KCL/Salt Water	9.0-10.0	32-50	8-10	11-12

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DRILLING PROGRAM

5. Mud Program (cont.)

There will be sufficient mud on location to control a blowout should one occur.

A mud test shall be performed every 24 hours after mudding up to determine, as applicable: density, viscosity, gel strength, filtration, and pH.

b. Mud monitoring equipment to be used is as follows:

1. Periodic checks will be made each tour of the mud system. The mud level will be checked visually.

c. The concentration of hazardous substances in the reserve pit at the time of pit backfilling must not exceed the standards set forth in the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA).

d. All oil and gas drilling related CERCLA hazardous wastes/substances removed from a location and not reused at another drilling location must be disposed of at an EPA approved hazardous waste facility.

6. The anticipated type and amount of testing, logging and coring are as follows:

a. No drill stem tests are anticipated. If DST's are run, the following requirements will be adhered to:

Initial opening of drill stem test tools shall be restricted to daylight hours unless specific approval to start during other hours is obtained from the authorized officer. However, DST's may be allowed to continue at night if the test was initiated during daylight hours and the rate of flow is stabilized and if adequate lighting is available (i.e. lighting which is adequate for visibility and vapor-proof for safe operations). Packers can be released, but tripping shall not begin before daylight, unless prior approval is obtained from the authorized officer. Closed chamber DSTs may be accomplished day or night.

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DRILLING PROGRAM

6. Logging, Coring and Testing Procedures (cont.)

A DST that flows to the surface with evidence of hydrocarbons shall be either reversed out of the testing string under controlled surface conditions, or displaced into the formation prior to pulling the test tool. This would involve provided some means for reverse circulation.

Separation equipment required for the anticipated recovery shall be properly installed before a test starts.

All engines within 100 feet of the wellbore that are required to "run" during the test shall have spark arresters or water cooled exhausts.

- b. The logging program will consist of a Dual Induction/SP/GR and Neutron/Density/GR will be run from T.D. to base of surface casing.
- c. No cores are anticipated.

- 7.
 - a. The expected bottom hole pressure is 3200 psi.
 - b. No hydrogen sulfide gas is anticipated.
 - c. Gas detecting equipment shall be installed in the mud return system for exploratory wells or wells where abnormal pressure is anticipated, and hydrocarbon gas shall be monitored for pore pressure changes.
 - d. Any unconfined gas, which exceeds 20 ppm H₂S gas, produced during testing or swabbing must be separated and flared. There must be a pilot light on all sour gas flares to insure continuous ignition.
 - e. Warning signs must be placed at appropriate facilities for H₂S.
 - f. Proper breathing apparatus must be available and used when working in an H₂S environment exceeding 20 ppm.
 - g. A wind sock must be placed on the tank battery as to be visible from everywhere on the location.

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DRILLING PROGRAM

7. H2S and Bottom Hole Pressures (cont.)

- h. All safety equipment will be installed and working prior to entering hydrogen sulfide zones.
- i. All flare systems shall be designed to gather and burn all gas. The flare line(s) discharge shall be located not less than 100 feet from the wellhead, having straight lines unless turns are targeted with running tees, and shall be positioned downwind of the prevailing wind direction and shall be anchored. The flare system shall have an effective method for ignition. Where noncombustible gas is likely or expected to be vented, the system shall be provided supplemental fuel for ignition and to maintain a continuous flare.

- 8.
 - a. Drilling will commence immediately upon approval of this application.
 - b. It is anticipated that the drilling of this well will take approximately 20-25 days.
 - c. The following shall be entered on the driller's log:
 - 1. Blowout preventer pressure tests, including test pressures and results;
 - 2. Blowout preventer tests for proper functioning;
 - 3. Blowout prevention drills conducted;
 - 4. Casing run, including size, grade, weight, and depth set;
 - 5. How the pipe was cemented, including amount of cement, type, whether cement circulated, location of the cementing tools, etc.
 - 6. Waiting on cement time for each casing string.
 - 7. Casing pressure tests after cementing, including test pressures and results.

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DRILLING PROGRAM

8. Notification Requirements (cont.)

- d. Section 102 (b) (3) of the Federal Oil and Gas Royalty Management Act of 1982, as implemented by the applicable provision of the operating regulations at Title 43 CFR 3162.4-1 (c), requires that "not later than the 5th business day after any well begins production on which royalty is due anywhere on the lease site or allocated to a lease site, or resumes production in the case of a well which has been off production for more than 90 days, the operator shall notify the authorized officer by letter or sundry notice, Forms 3160-5 or orally to be followed by a letter or sundry notice, of the date on which such production has begun or resumed."

The date on which production is commenced or resumed will be construed for oil wells as the date on which liquid hydrocarbons are first sold or shipped from a temporary storage facility, such as a test tank, and for which a run ticket is required to be generated or, the date on which liquid hydrocarbons are first produced into a permanent storage facility, whichever first occurs; and, for gas sells as the date on which associated liquid hydrocarbons are first sold or shipped from a temporary storage facility, such as a test tank, and for which a run ticket is required to be generated or, the date on which gas is first measured through permanent metering facilities, whichever first occurs.

If the operator fails to comply with this requirements in the manner and time allowed, the operator shall be liable for a civil penalty of up to \$10,000 per violation for each day such violation continues, not to exceed a maximum of 20 days. See Section 109 (c) (3) of the Federal Oil and Gas Royalty Management Act of 1982 and the implementing regulations at Title 43 CFR 3163.4-1 (b) (5) (ii).

f. Notifications Requirements:

1. The BLM in Vernal, Utah (801/789-1362) will be notified verbally not more than 48 hours after the well is spudded, or on the next regular work day.
2. The BLM will be notified verbally at least 48 hours prior to running/cementing surface casing.

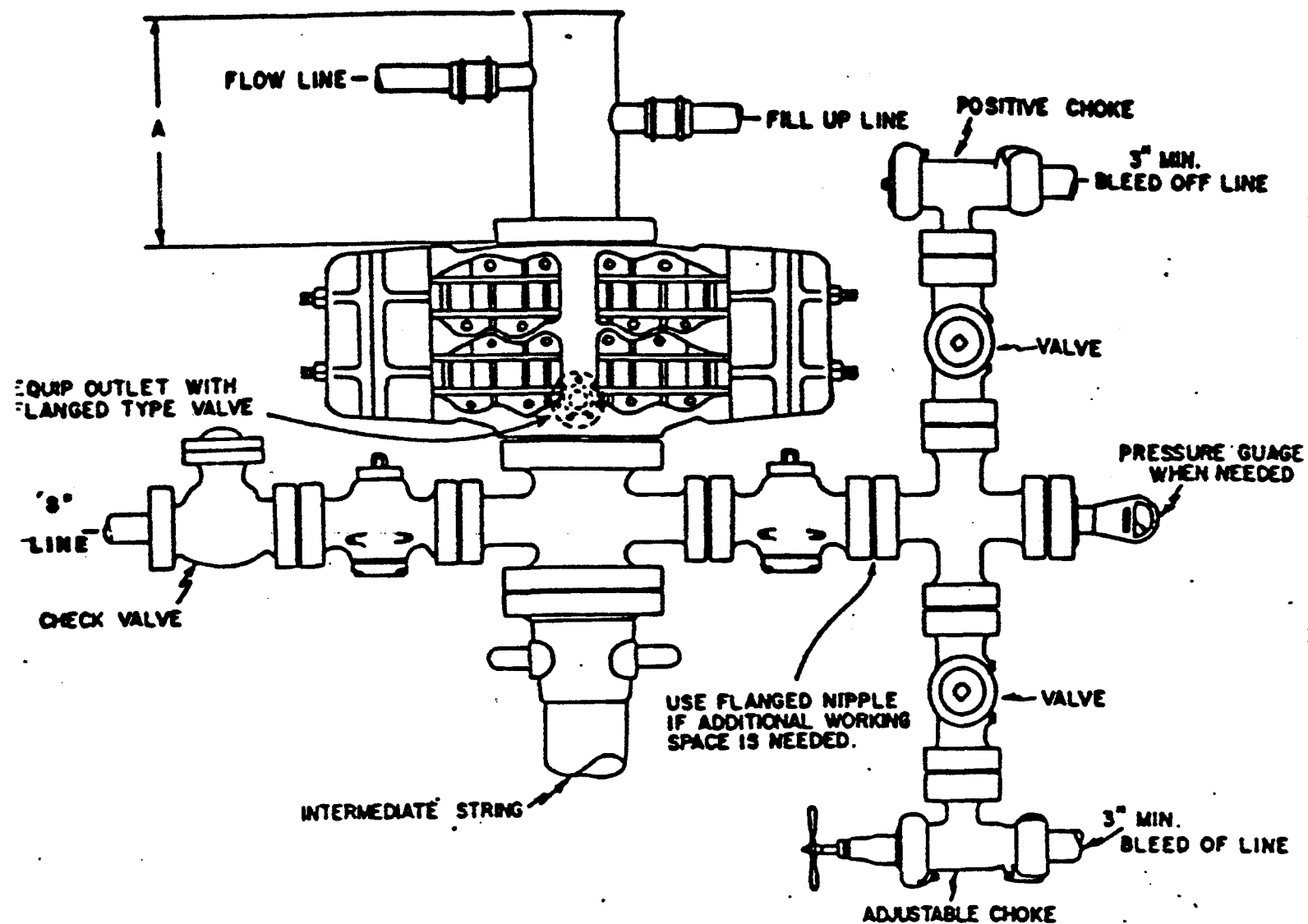
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DRILLING PROGRAM



8. Notification Requirements (cont.)

3. For verbal plugging orders on drilling locations, the BIM will be notified 24 hours prior to plugging.

The following standards apply to the abandonment of newly drilled dry or non-productive wells in accordance with 43 CFR 3162.3-4. Approval shall be obtained prior to the commencement of abandonment. All formations bearing usable-quality water, oil, gas, or geothermal resources, and/or a prospectively valuable deposit of minerals shall be protected. Approval may be given orally by the authorized officer before abandonment operations are initiated. This oral request and approval shall be followed by a written notice of intent to abandon filed not later than the fifth business day following oral approval. Failure to obtain approval prior to commencement of abandonment operations shall result in immediate assessment under 43 CFR 3153.1(b)(3). The hole shall be in static condition at the time any plugs are placed (this does not pertain to plugging lost circulation zones). Within 30 days of completion of abandonment, a subsequent report of abandonment shall be filed.



NOTE BLOWOUT PREVENTER MUST HAVE DOUBLE RAMS; ONE BLIND & ONE PIPE RAM OR THE EQUIPMENT MUST CONSIST OF TWO BLOWOUT PREVENTERS, ONE EQUIPPED WITH BLIND RAMS & THE OTHER WITH PIPE RAMS. ALWAYS PLACE THE BLIND RAMS IN THE TOP PREVENTER

 SANTA FE ENERGY COMPANY ROCKY MOUNTAIN DISTRICT DENVER, COLORADO	
3000 PSI	
	

ONSHORE ORDER NO. 1
Santa Fe Energy Company
Hill Creek Federal No. 1-28
605' FNL and 1615' FWL
NE NW Sec. 28, T10S - R20E
Uintah County, Utah

SURFACE USE PLAN

1. Existing Roads

- a. Directions to the location from Ouray, Utah are as follows:
From the bridge in Ouray go South for 8.5 miles to a fork in the road. Stay right on the Willow Creek Road and go 2.7 miles to another fork in the road (Cotton Petroleum sign). Stay right and go over Black Bridge. Go 1/2 mile, turn right and go 1.7 miles. Turn left onto the new access route (flagged) and proceed an additional 4410 feet to the location.
- b. For location of access roads within a 2-Mile radius, see Map #1.
- c. Improvement to the existing access will not be necessary.
- d. All existing roads will be maintained and kept in good repair during all drilling and completion operations associated with this well.
- e. Existing roads and newly constructed roads on surface under the jurisdiction of any Surface Managing Agency shall be maintained in accordance with the standards of the SMA.
- f. A right-of-way application has been submitted to the BIA in Fort Duchesne for the new portion of the access road.

2. Planned Access Roads

- a. All new roads to be built, or reconstructed roads are shown on Map #1.
- b. The last 4410 feet will be new access. The road will be crowned and ditched from the point where it leaves maintained road. The road will have a running surface of approximately 18 feet with a total width of 40 feet.
- c. The maximum grade will be 10%.
- d. No turnouts are planned.

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SURFACE USE PLAN

2. Planned Access Roads (cont.)

- e. The access road was centerline flagged at the time of staking.
- f. Drainage will be installed as deemed necessary by the dirt contractor. No drainages shall be blocked by loose dirt or debris.
- g. No culverts will be necessary at this time. One low water crossing will be installed as shown on Map #1.
- h. Road drainage crossings shall be of the typical dry creek drainage crossing type. Crossings shall be designed so they will not cause siltation or accumulation of debris in the drainage crossing nor shall the drainages be blocked by the roadbed. Erosion of drainage ditches by runoff water shall be prevented by diverting water off at frequent intervals by means of cutouts. Upgrading shall not be allowed during muddy conditions. Should mud holes develop, they shall be filled in and detours around them avoided.
- i. No cattleguards will be necessary.
- j. Surface disturbance and vehicular travel will be limited to the approved location and approved access route. Any additional area needed will be approved in advance.
- k. Surfacing material may be necessary depending on weather conditions.

3. Location of Existing Wells Within a 1-Mile Radius of the Proposed Location. (See Map #1).

- a. Water Wells -none
- b. Injection or disposal wells -none
- c. Producing Wells - two
- d. Drilling Wells - none
- e. Shut-in Wells - none
- f. Abandoned Wells - none

ONSHORE ORDER NO. 1
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605' FNL and 1615' FWL
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SURFACE USE PLAN

4. Location of Tank Batteries and Production Facilities.

- a. All permanent structures (onsite for six months or longer) constructed or installed (including oil well pump jacks) will be painted a non-reflective earthtone color to match one of the standard environmental colors, as determined by the Rocky Mountain Five State Interagency Committee. All facilities will be painted within six months of installation. Facilities required to comply with the Occupational Safety and Health Act (OSHA) will be excluded. The required paint color is Desert Tan.
- b. If a tank battery is constructed on this lease, it will be surrounded by a dike of sufficient capacity to contain at least 1-1/2 times the storage capacity of the battery. The integrity of the dike must be maintained.
- c. If commercial production is established, a Sundry Notice with a production facility layout will be submitted.
- d. All loading lines will be placed inside the berm surrounding the tank battery.
- e. Any necessary pits will be properly fenced to prevent any wildlife entry. The production pit will be flagged overhead.
- f. All site security guidelines identified in 43 CFR 3162.7 regulations will be adhered to.
- g. All off-lease storage, off-lease measurement, or commingling on-lease or off-lease will have prior written approval from the District Manager.
- h. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed.
- i. Gas meter runs for each well will be located within 500 feet of the wellhead. The gas flowline will be buried from the wellhead to the meter and 500 feet downstream of the meter run or any production facilities. Meter runs will be housed and/or fenced.
- j. All access roads will be upgraded to Class III standards and maintained as necessary to prevent erosion and accommodate year-round traffic.



Permitco
Permitco Incorporated
A Petroleum Permitting Company

ONSHORE ORDER NO. 1
Santa Fe Energy Company
Hill Creek Federal No. 1-28
605' FNL and 1615' FWL
NE NW Sec. 28, T10S - R20E
Uintah County, Utah

SURFACE USE PLAN

4. Production Facilities (cont.)

- k. The road will be maintained in a safe useable condition.

5. Location and Type of Water Supply

- a. All water needed for drilling purposes will be obtained from Willow Creek at approximately the NW NW Section 27, T10S - R20E.
- b. Water will be trucked to location over the roads marked on Map #1.
- c. No water well is to be drilled on this lease.
- d. Permission for the use of this water will be obtained from the Tribe.

6. Source of Construction Material

- a. Surface and subsoil materials in the immediate area will be utilized.
- b. Any gravel used will be obtained from a commercial source.
- c. No construction materials will be removed from Federal land.

7. Methods of Handling Waste Disposal

- a. The reserve pit will be lined with either native clay, commercial bentonite or plastic sufficient to prevent seepage. (If a plastic nylon reinforced liner is used, it shall be torn and perforated after the pit dries and before backfilling the reserve pit.)
- b. Pits will be constructed so as not to leak, break or allow discharge of liquids.
- c. Burning will not be allowed. All trash will be contained in a trash cage and its contents removed at the end of drilling operations and hauled to an approved disposal sight. The road and pad will be kept litter free.

SURFACE USE PLAN

7. Methods for Handling Waste Disposal (cont.)

- d. Produced waste water will be confined to a unlined pit for a period not to exceed 90 days after initial production. During the 90-day period, an application for approval of a permanent disposal method and location, along with the required water analysis, will be submitted for the District Manager's approval.
- e. Drill cuttings are to be contained and buried in the reserve pit.
- f. Any salts and/or chemicals which are an integral part of the drilling system will be disposed of in the same manner as the drilling fluid.
- g. A chemical porta-toilet will be furnished with the drilling rig.
- h. The produced fluids will be produced into a test tank until such time as construction of production facilities is completed. Any spills of oil, gas salt water or other produced fluids will be cleaned up and removed.
- i. Pits are not to be located in natural drainages where a flood hazard exists or surface runoff will destroy or damage the pit walls, unless otherwise herein provided.

8. Ancillary Facilities

- a. There are no airstrips, camps, or other facilities planned during the drilling of the proposed well.

9. Well Site Layout

- a. The reserve pit will be located on the northeast corner of the location. The stockpiled topsoil will be stored on the west side of the wellpad. Pit subsoil will be stockpiled on the west side of the pit. Access to the wellpad will be from the north.
- b. See Diagram #1 for rig layout. See Diagram #2 for cross section of drill pad. See Diagram #3 for cuts and fill.

ONSHORE ORDER NO. 1
Santa Fe Energy Company
Hill Creek Federal No. 1-28
605' FNL and 1615' FWL
NE NW Sec. 28, T10S - R20E
Uintah County, Utah

SURFACE USE PLAN

9. Wellsite Layout (cont.)

- c. The location of mud tanks; reserve pit, trash cage; pipe racks; living facilities and soil stockpiles will be shown on Diagrams #1 and #3.
- d. The blooie pit will be located a minimum of 130 feet from the well head on the southeast corner of the reserve pit.
- e. During construction, all brush will be removed from the wellpad and access road and stockpiled separately from the topsoil.
- f. During construction the maximum amount of topsoil will be removed from the entire wellpad and stockpiled separately on the west side of the location to be used later during the reclamation process.
- g. All pits will be fenced with a wire mesh fence and topped with at least one strand of barbed wire. The reserve pit will be fenced on three sides before drilling starts. The fourth side will be fenced as soon as the drilling is completed. Any hydrocarbons on the pit will be removed from the pit as soon as possible after drilling operations are completed. Pits will be fenced and maintained until clean-up.
- h. The stockpiled topsoil will be stored on the west side of the location. Access to the well pad will be from the north.

10. Reclamation

- a. Immediately upon well completion, the location and surrounding area will be cleared of all debris, materials, trash and junk not required for production.
- b. Before any dirt work to restore the location takes place, the reserve pit must be completely dry and all cans, barrels, pipe, etc. will be removed. The reserve pit and that portion of the location and access road not needed for production facilities/operations will be reclaimed. The reserve pit will be reclaimed within 180 days from the date of well completion.
- c. All disturbed areas will be recontoured to approximate natural contours.

ONSHORE ORDER NO. 1
Santa Fe Energy Company
Hill Creek Federal No. 1-28
605' FNL and 1615' FWL
NE NW Sec. 28, T10S - R20E
Uintah County, Utah

SURFACE USE PLAN

10. Reclamation of Surface (cont.)

- d. The stockpiled topsoil will be evenly distributed over the disturbed areas.
- e. The reserve pit and that portion of the location and access road not needed for production and production facilities will be reclaimed as described in the reclamation section. Enough topsoil will be kept to reclaim the remainder of the location at a future date. This remaining stockpile of topsoil will be seeded in place using the prescribed seed mixture.
- f. Waste materials will be disposed of as stated in #7 of this Surface Use Plan.
- g. Prior to reseeding, all disturbed areas, including the access roads, will be scarified and left with a rough surface (new access only).
- h. Seed will be broadcast or drilled at the time specified by the BIA. If broadcast, a harrow or some other implement will be dragged over the seeded area to assure seed coverage and the seed mixture will be proportionately larger (double the lbs. per acres).
- i. An appropriate seed mixture will be determined by the BIA at the time the restoration activities are scheduled to begin. All seeding will be done from September 30th until the ground freezes.
- j. At such time as the well is plugged and abandoned the operator will submit a surface reclamation plan to the Surface Management Agency for prescribed seed mixtures and reseeding requirements.
- k. Abandoned wellsites, roads, or other disturbed areas will be restored to near their original condition. This procedure will include: (a) reestablishing irrigation systems where applicable, (b) reestablishing soil conditions in irrigated fields in such a way as to insure cultivation and harvesting of crops and, (c) insuring revegetation of the disturbed areas to the specifications of the Ute Indian Tribe or the BIA at the time of abandonment.

ONSHORE ORDER NO. 1
Santa Fe Energy Company
Hill Creek Federal No. 1-28
605' FNL and 1615' FWL
NE NW Sec. 28, T10S - R20E
Uintah County, Utah

SURFACE USE PLAN

10. Reclamation of Surface (cont.)

1. The operator will submit a plan of controlling noxious weeds along rights-of-way for roads, pipelines, well sites or other applicable facilities. A list of noxious weeds can be obtained from the appropriate county extension office.

11. a. Surface Ownership

The wellpad and access road are on lands managed by the Ute Indian Tribe.

b. Mineral Ownership

Federal

12. Other Information

- a. There will be no change from the proposed drilling and/or workover program without prior approval from the District Manager. Safe drilling and operating practices must be used. All wells, whether drilling, producing, suspended, or abandoned will be identified in accordance with 43 CFR 3162.2.
- b. "Sundry Notice and Report on Wells" (Form 3160-5) will be filed for approval for all changes of plans and other operations in accordance with 43 CFR 3164.
- c. The dirt contractor will be provided with an approved copy of the surface use plan and will keep a copy on-site during the construction and reclamation operations.
- d. This permit will be valid for a period of one year from the date of approval. After permit termination, a new application will be filed for approval for any future operations.
- e. A Class III survey was conducted by Senco-Phenix. No significant cultural resources were found and clearance is recommended. A copy of this report is attached.

ONSHORE ORDER NO. 1
Santa Fe Energy Company
Hill Creek Federal No. 1-28
605' FNL and 1615' FWL
NE NW Sec. 28, T10S - R20E
Uintah County, Utah

SURFACE USE PLAN

12. Other Information (cont.)

- f. If during operations, any archaeological or historical sites, or any object of antiquity (subject to the Antiquities Act of June 8, 1906) are discovered, all operations which would affect such sites are to be suspended and the discovery reported promptly to the Surface Management Agency.
- g. The operator or his contractor shall contact the BLM and BIA Offices at 801/789-1362 (BLM) and 801/722-2406 (BIA) between 24 and 48 hours prior to construction activities.
- h. The BLM and BIA Offices shall be notified upon site completion prior to moving on the drilling rig.
- i. Drilling rigs and/or equipment used during drilling operations on this wellsite will not be stacked or stored on Federal Lands after the conclusion of drilling operations or at any other time without BLM authorization. However, if BLM authorization is obtained, it is only a temporary measure to allow time to make arrangements for permanent storage on commercial facilities. (The BLM does not seek to compete with private industry. There are commercial facilities available for stacking and storing drilling rigs.)
- j. Operator's employees, including subcontractors, will not gather firewood along roads constructed by operators. If wood cutting is required, a permit will be obtained from the Forestry Department of the BIA pursuant to 25 CFR 169.13 "Assessed Damages Incident to Right-of-Way Authorization". All operators, sub-contractors, vendors and their employees or agents may not disturb saleable timber (including firewood) without a duly granted wood permit from the BIA Forester.
- k. If the surface rights are owned by the Ute Indian Tribe and mineral rights are owned by another entity, an approved rights-of-way will be obtained from the BIA before the operator begins any construction activities. If the surface is owned by another entity and the mineral rights are owned by the Ute Indian Tribe, rights-of-way will be obtained from the other entity.

ONSHORE ORDER NO.
Santa Fe Energy Company
Hill Creek Federal No. 1-28
605' FNL and 1615' FWL
NE NW Sec. 28, T10S - R20E
Uintah County, Utah

SURFACE USE PLAN

12. Other Information (cont.)

1. All roads constructed by operators on the Uintah and Ouray Indian Reservation will have appropriate signs. Signs will be neat and of sound construction. They will state: (a) that the land is owned by the Ute Indian Tribe, (b) the name of the operator, (c) that firearms are prohibited to all non-Ute Tribal members, (d) that permits must be obtained from the BIA before cutting firewood or other timber products and (e) only authorized personnel permitted.
- m. All well site locations on the Uintah and Ouray Indian Reservation will have an appropriate sign indicating the name of the operator, the lease serial number, the well name and number, the survey description of the well (either footages or the quarter-quarter section, the section, township, and range).

13. Lessee's or Operator's Representative and Certification

Permit Matters

PERMITCO INC.

Lisa L. Smith
13585 Jackson Drive
Denver, CO 80241
303/452-8888

Drilling & Completion Matters

SANTA FE ENERGY COMPANY

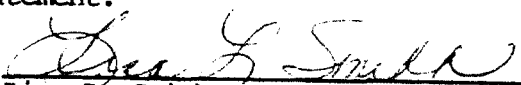
One West Third Street, Suite 500
Tulsa, Oklahoma 74103
Sam Morgan - Sr. Drilling Engineer
918/582-6944

Certification

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by Santa Fe Energy Operating Company and its contractors and subcontractors in conformity with the plan and the terms and conditions under which it is approved.

This statement is subject to the provisions of 18.U.S.C. 1001 for the filing of a false statement.

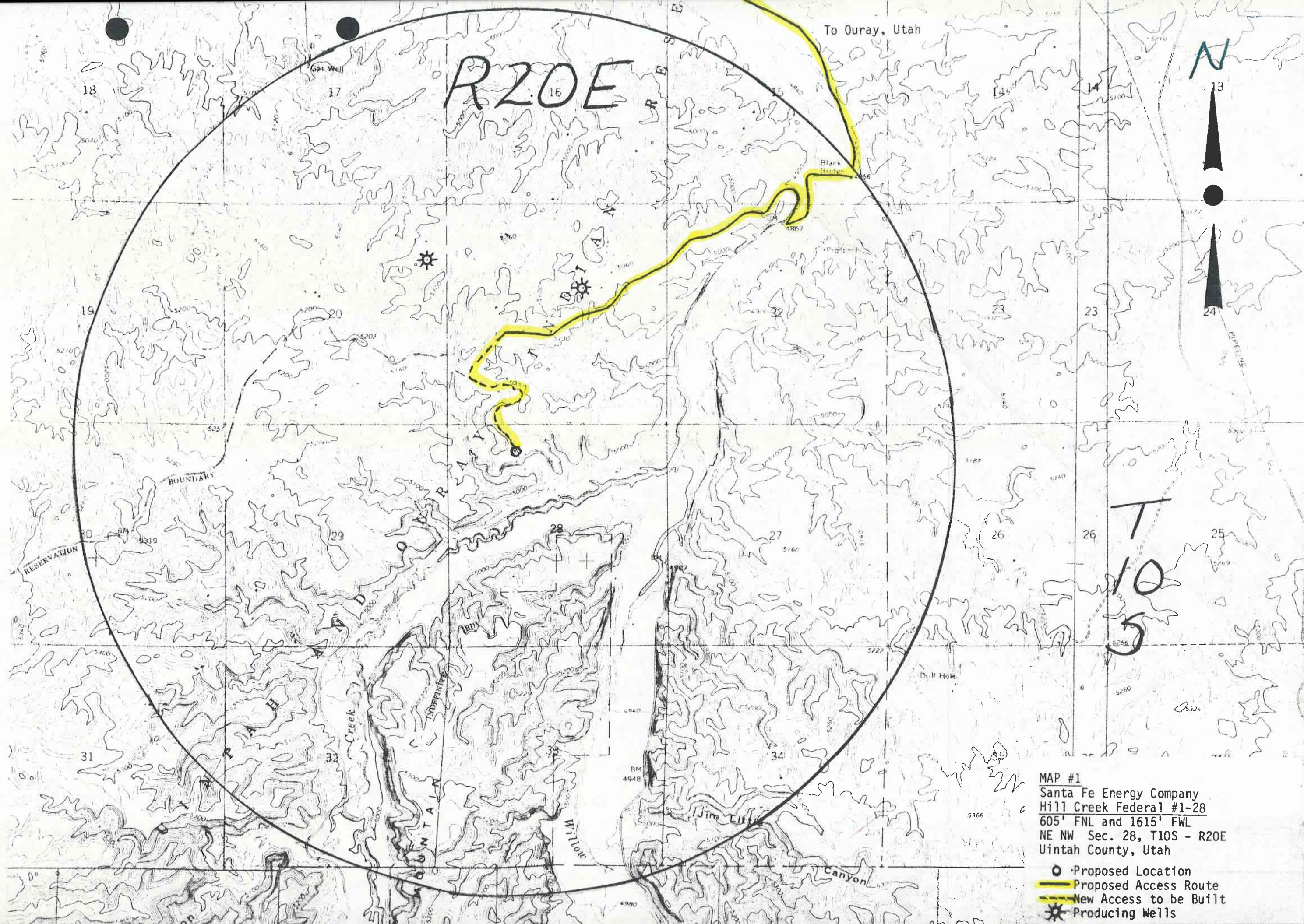
August 16, 1989
Date:



Lisa L. Smith - PERMITCO INC.
Authorized Agent for:
SANTA FE ENERGY COMPANY



Permitco Incorporated
A Petroleum Permitting Company



MAP #1
Santa Fe Energy Company
Hill Creek Federal #1-28
605' FNL and 1615' FWL
NE NW Sec. 28, T10S - R20E
Uintah County, Utah

- Proposed Location
- Proposed Access Route
- - - New Access to be Built
- ★ Producing Wells

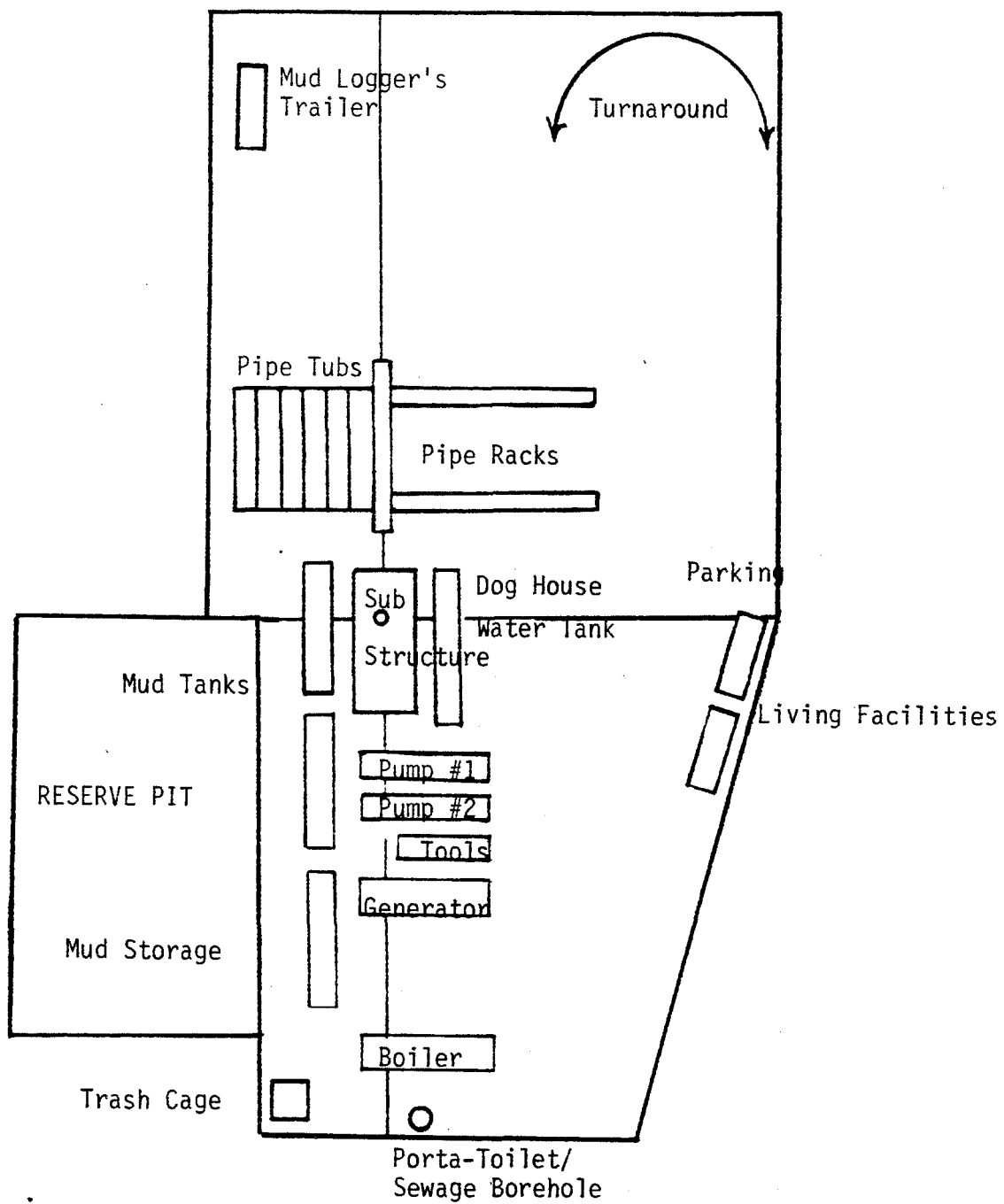
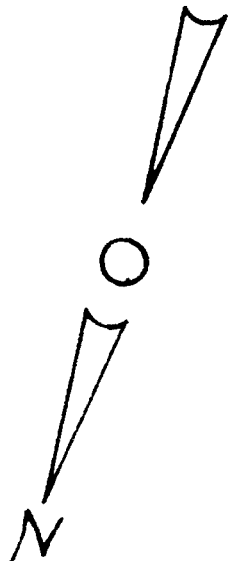


DIAGRAM #1
Santa Fe Energy Company
Rig Layout
Hill Creek Federal #1-28
NE NW Sec. 28, T10S - R20E
Uintah County, Utah

Cross Section

Hill Creek Federal # 1-28

Cut *////*
Fill *||||*

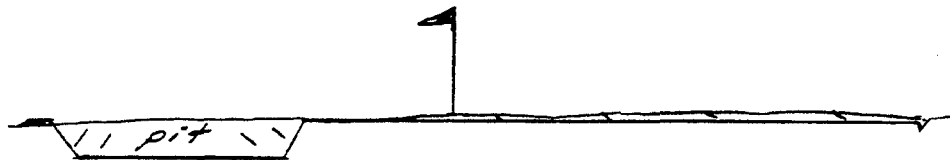
1"=50' Horz. & Vert.

A



AA

B



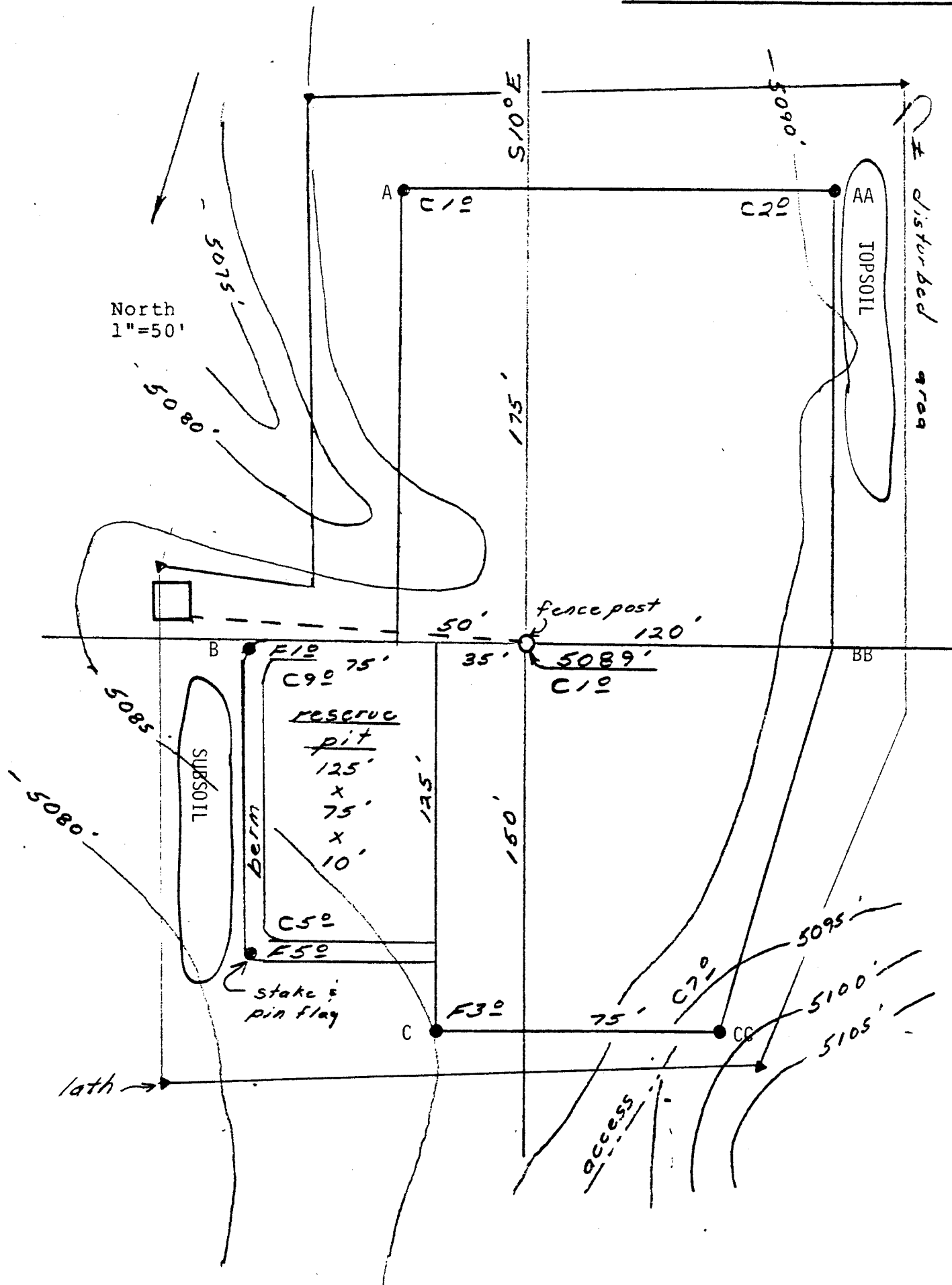
BB

C



CC

Hill Creek Federal # 1-28





SENCO-PHENIX

INTENSIVE CULTURAL RESOURCE SURVEY
AND INVENTORY OF THE HILL CREEK FEDERAL 1-28
WELL PAD AND ACCESS ROAD

PERFORMED FOR
SANTA FE ENERGY COMPANY

In accordance with The Ute Tribe
State of Utah Guidelines in Uintah County, Utah,
State of Utah Antiquities Permit #89SC4571

SP-UT-120
August 3, 1989

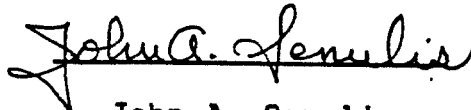
John A. Senulis
Direct Charge of Fieldwork

INTENSIVE CULTURAL RESOURCE SURVEY
AND INVENTORY OF THE HILL CREEK FEDERAL 1-28
WELL PAD AND ACCESS ROAD

PERFORMED FOR
SANTA FE ENERGY COMPANY

In accordance with The Ute Tribe
State of Utah Guidelines in Uintah County, Utah,
State of Utah Antiquities Permit #89SC4571

SP-UT-120
August 3, 1989

A handwritten signature in cursive script, reading "John A. Senulis". The signature is written in dark ink and is positioned above the printed name.

John A. Senulis

Principal Investigator

ABSTRACT

An intensive cultural resource survey was performed on the Hill Creek Federal #1-28 well pad, surrounding ten acres and 1/2 mile of access road for Santa Fe Energy Company by John A. Senulis of SENCO-PHENIX.

No cultural resources were located and archeological clearance is recommended.

SURVEY LOCATION

The well pad is located in the NE/NW (605 FNL, 1615 FWL) of Section 28, T10S, R20E. The access road will begin in the NW/SW of Section 21, T10S, R20E and proceeds southerly, partially along a pipeline corridor, to the well pad.

The project area location is noted on the enclosed copy of the U.S.G.S. 7.5' quad Big Pack Mtn., NW, Utah, (PR 1987). The well pad and access road were staked.

GENERAL ENVIRONMENT

The general area is part of the Colorado Plateau physiographic province noted by horizontal rock strata with retreating escarpments forming the canyonlands in the south of the Colorado River and Green River.

The Uinta Basin subdivision is bound by the south flank of the Uinta Mountains on the north, and by Book Cliffs to the south. The northeasterly flowing Green River Drainage is the major water source.

Predominant bedrock in the basin is quartzite in the basin proper grading into sandstones, shales and glacial outwash on the slopes.

The mid-latitude semi-arid climate is typically Continental with cold winters and warm summers. Precipitation is directly related to altitude and degree of slope; the minima is less than 10 inches annually on the basin floor to the maxima of more than 10 inches annually above 8,000 feet.

Soils and vegetation are also reflective of the type of soil, moisture and altitude conditions.

The White River Drainage has moderately alkaline, fine, sandy desert loams that are well drained and have a moderate rate of deposition. Primary vegetation consists of Indian ricegrass, needle and thread, winterfat, with some black sagebrush and shadscale depending upon the alkalinity of the soil.

The drainages grade into the predominant shale based shadscale-sagebrush zones of the lower slopes where alkalinity is increased by less permeable desert loams. In addition to the above, saltbrush, greasewood, and other alkaline adapted grasses, shrubs and forbs become more common.

Above 6,000 feet the upland shallow hardpans, stony hills, gravels, and loams support the juniper-pinyon pine zone with muttongrass, bluebunch, wheatgrass, and prickly pear.

The juniper-pinyon pine zone gradually diminishes toward 8,000 feet giving way to the mountain stony and shallow loams supporting gambel oak, mountain brome and serviceberries.

This general environment has supported a rich faunal assemblage which formerly contained bison in large numbers. Today the area is dominated by deer, rabbits, and burrowing animals with occasional forays of elk and moose. A seasonal waterfowl population and other migratory and raptorial birds complete the scenario.

The dominant ground patterns have changed dramatically in the past 100 years with the introduction of grazing animals, primarily sheep and cattle, and agriculture. The patterns have resulted in an increase of scavengers and pests such as badgers and coyotes.

Variations of the modern topography have been induced by agriculture, grazing, recreation, and oil and gas exploration. Some areas, such as watersheds and wildlife habitats have stabilized parts of the environment.

SPECIFIC ENVIRONMENT

The project area falls within the Central Badlands District physiographic region of the Uinta Basin. The Badlands district is characterized by long and broad erosional benches adjacent to extensive badlands. The benches are deeply dissected by intermittent streams which eventually drain into the Green River, northwest of the project area.

The project area is along a bench with narrow finger-ridges with a topographical form of dissected uplands at an elevation of approximately 5100 feet.

The immediate drainages are Hill Creek and Willow Creek, which flow north into the Green River some 10 miles away.

Soils are primarily rocky colluviums mixed with tan silty loams. There are some pockets of stabilized sand dunes on the benches. Large outcroppings of sandstone bedrock are exposed along the Willow Creek drainage.

Vegetation on the benches falls within the desert shrub community with shadscale, saltbush, bud sagebrush, winterfat, and ephedra. Clumps of Indian Ricegrass occur in the eolian sand dunes along with rabbitbrush, galleta grass, and blue gramma.

Fauna for the area includes deer, antelope, rabbits and other burrowing animals. Birds, rodents and reptiles complete the scenario. On the day of survey horned toads were observed.

ARCHEOLOGICAL POTENTIAL

A files search conducted on July 27, 1989 by John A. Senulis at the Utah Division of State History, Antiquities Section indicated that the following projects had been performed in the survey area:

1. 1985, Sagebrush Archeology surveyed two proposed well locations and access roads in Section 27 and 34, T10S, R20E, and in Sections 26 and 35, T10S, R20E. No coordinates were given in report as to exact location of proposed wells and roads. No sites located.

2. 1989, SENCOS-PHENIX surveyed a pipeline corridor for Santa Fe Energy. A portion of the line runs through the S1/2/S1/2 of Section 21, T10S, R20E. One isolated find was located.

In addition to the above sites, it should be noted that numerous petroglyph panels have been recorded on the sandstone cliffs of the Willow Creek drainage.

METHODOLOGY

On August 1, 1989, a walkover survey was conducted by John A. Senulis and Jeanne Senulis, accompanied by Lonnie Nephi and Alvin Ignacio of the Ute Tribe. Transect spacing was 15 meters, with a total right-of-way of 30 meters. Special attention was paid to areas of ground exposure from animal burrowing and erosion, and to areas of human activity.

SURVEY CONDITIONS

The sky was overcast and the temperature was approximately 80 degrees F..

Visibility was generally very good, 80% because of low vegetation cover. Soils on the day of the survey were dry.

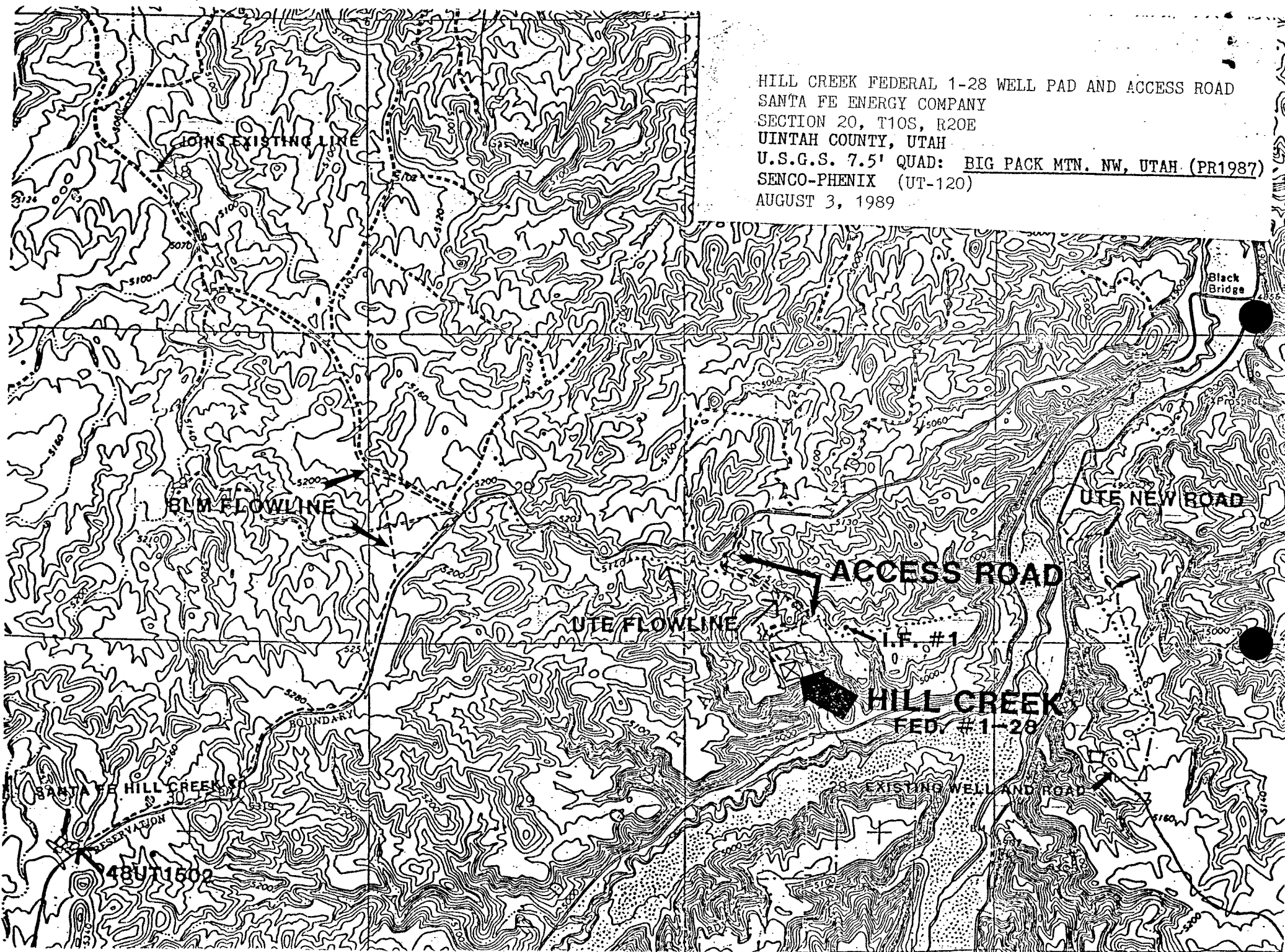
FINDINGS AND RECOMMENDATIONS

No cultural resources were located and archeological clearance is recommended.

If any cultural values are observed during operation of this lease/permit/right-of-way, they are to be left intact and the Ute Tribal Authorities in Fort Duchesne should be notified.

These recommendations are subject to approval or modification by the Ute Tribe, and the Utah State Historic Preservation Office.

HILL CREEK FEDERAL 1-28 WELL PAD AND ACCESS ROAD
SANTA FE ENERGY COMPANY
SECTION 20, T10S, R20E
UINTAH COUNTY, UTAH
U.S.G.S. 7.5' QUAD: BIG PACK MTN. NW, UTAH (PR1987)
SENCO-PHENIX (UT-120)
AUGUST 3, 1989



OPERATOR Santa Fe Energy Co. (N0830) DATE 8-29-89

WELL NAME Hill Creek Fed. 1-28

SEC NENW 28 T 10S R 20E COUNTY Uintah

43-047-31876
API NUMBER

Federal
TYPE OF LEASE

CHECK OFF:

☒ PLAT

☒ BOND

☒ NEAREST WELL

☒ LEASE

☒ FIELD

☒ POTASH OR OIL SHALE

PROCESSING COMMENTS:

No other well within 920'
Need Water Permit
Cultural Resource Survey performed 8-3-89. (#89SC4571)
Exc. loc. requested 8-29-89 / Received 9-18-89

APPROVAL LETTER:

SPACING: ☐ R615-2-3 N/A ☐ R615-3-2
UNIT

☒

(197-1 10S 20E sec. 1-12 only)
(190-5(B) 10-28-82)
CAUSE NO. & DATE

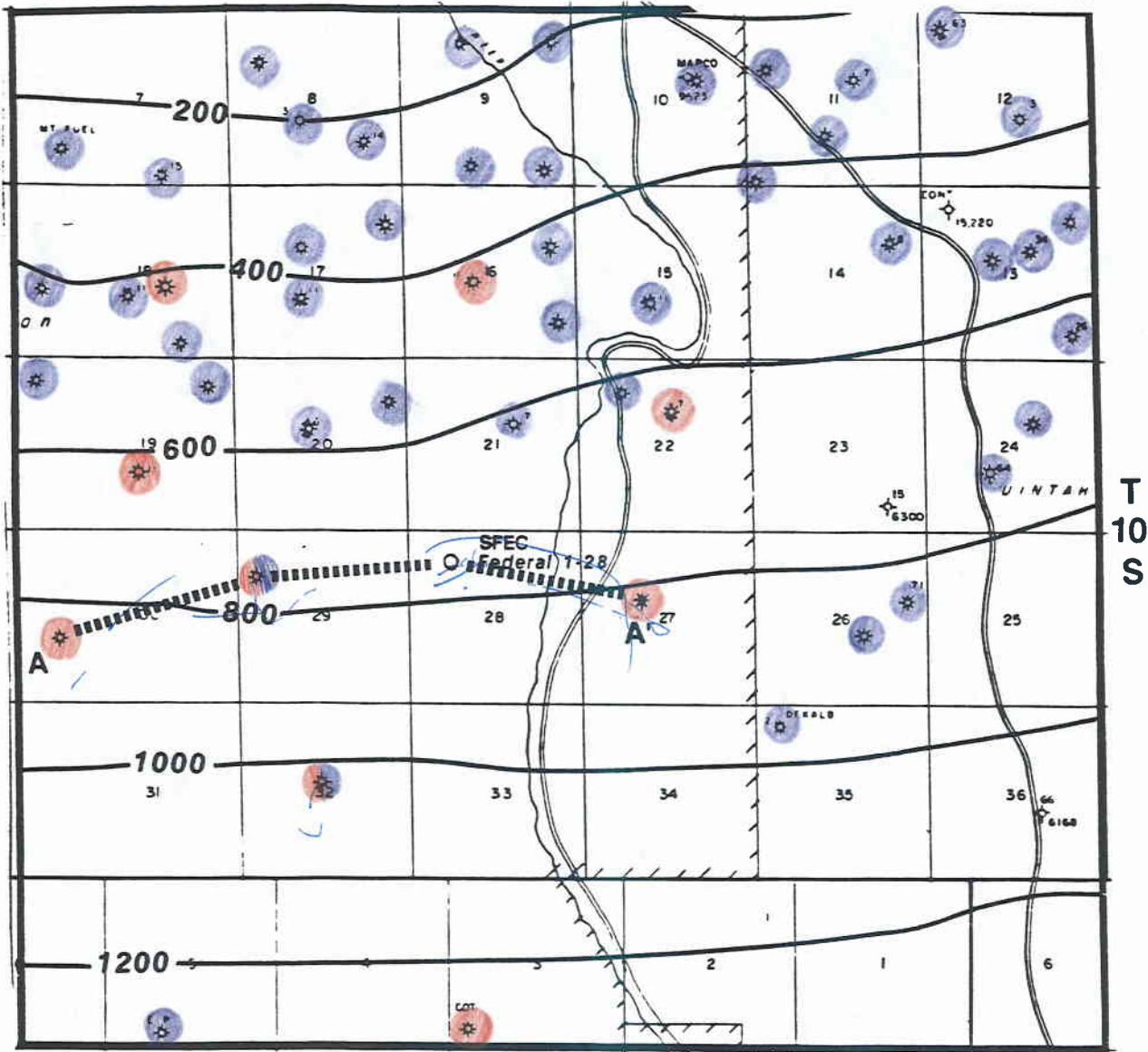
☒ R615-3-3

STIPULATIONS: (Cause No. 197-4 8-24-89)
Received Copy 9-22-89.

1. R615-3-31 (Designated Oil Shale Areas)
2. Water Permit

R 20 E

Exhibit 6



SANTA FE ENERGY COMPANY Federal 1-28

STRUCTURE MAP - TOP WASATCH

CL = 200'



WASATCH PRODUCER



MESA VERDE PRODUCER

RECEIVED

AUG 24 1989

DIV. OIL, GAS, MINING

LAW OFFICES OF
VAN COTT, BAGLEY, CORNWALL & MCCARTHY

A PROFESSIONAL CORPORATION

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50 SOUTH MAIN STREET

SALT LAKE CITY, UTAH 84144

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1890-1896

BENNETT, HARKNESS, HOWAT
SUTHERLAND & VAN COTT
1896-1902

SUTHERLAND, VAN COTT & ALLISON
1902-1907

VAN COTT, ALLISON & RITER
1907-1917

VAN COTT, RITER & FARNSWORTH
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MARILYN M. HENRIKSEN
WILLIAM R. RICHARDS
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PATRICIA A. OHLSEN
DONALD L. DALTON
JOHN W. ANDREWS
MARVIN D. BAGLEY
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JOEL R. DANGERFIELD
GERALD H. SUNNIVILLE
RONALD W. GOSS
DAVID L. ARRINGTON
SUSAN G. LAWRENCE
PHYLLIS J. VETTER
CASEY K. MCGARVEY

August 29, 1989

Gregory P. Williams
Chairman
Utah Board of Oil, Gas & Mining
3 Triad Center, Suite 350
355 West North Temple
Salt Lake City, Utah 84180-1203

Attn: Marjie Anderson

Re: Santa Fe Energy Operating Partners, L.P.
Hillcreek Prospect
Docket No. 89-013
Cause No. 197-4

Dear Mr. Williams:

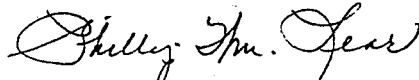
I am transmitting to you a proposed Findings of Fact, Conclusions of Law, and Order in this matter. Should you have any questions or instructions, please contact me.

Santa Fe Energy has agreed to petition the Board to expand the spacing established in this matter to the additional sections owned by Santa Fe. The petition will be filed timely in order for the matter to be heard in October. Santa Fe anticipates that the transcript of this matter will be incorporated as testimony for the new matter and that no additional witnesses will need to be examined. I will attend the October hearing and make the presentation.

Gregory P. Williams
August 29, 1989
Page 2

Should you have any questions or instructions, please
contact me.

Very truly yours,


Phillip Wm. Lear

PWL:wh

encl.

cc: J. Priest (w/encl.)

BEFORE THE BOARD OF OIL, GAS AND MINING

DEPARTMENT OF NATURAL RESOURCES

STATE OF UTAH

IN THE MATTER OF THE REQUEST)	
FOR AGENCY ACTION OF SANTA FE)	
ENERGY OPERATING PARTNERS,)	
L.P. FOR AN ORDER ESTABLISHING)	FINDINGS OF FACT, CONCLUSIONS
A 640-ACRE DRILLING UNIT FOR)	OF LAW, AND ORDER
THE DEVELOPMENT AND PRODUCTION)	
OF OIL AND GAS FROM THE)	Docket No. 89-013
WASATCH-MESA VERDE FORMATIONS)	
IN SECTION 28 OF TOWNSHIP 10)	Cause No. 197-4
SOUTH, RANGE 20 EAST, S.L.M.,)	
IN UTAH COUNTY, UTAH)	

This cause came on regularly for hearing before the Board of Oil, Gas and Mining (the "Board") on Thursday, August 24, 1989, at 10:00 a.m., in the Boardroom of the Division of Oil, Gas and Mining at 355 West North Temple, 3 Triad Center, Suite 301, Salt Lake City, Utah.

The following board members were present: Gregory P. Williams, Chairman; E. Steele McIntyre; Richard B. Larsen; Judith F. Lever; and Kent G. Stringham. Staff members of the Division of Oil, Gas and Mining (the "Division") present and participating in the hearing included Dr. Dianne R. Nielson, Director; Ronald J. Firth, Associate Director; John R. Baza, Petroleum Engineer; and ^{Brad Hill} ~~Ray Kerns~~, Geologist, ~~Utah Geological and Mineral Survey~~. Appearance was made by Phillip Wm. Lear of Van Cott, Bagley, Cornwall & McCarthy for Santa Fe Energy

12. The well is to be located in the W $\frac{1}{2}$ of said Section 28, consistent with wells drilled on adjacent lands.

13. Only one producing well into the spaced interval should be permitted within the drilling unit established by the Board.

14. The maximum area that can be efficiently and economically drained by one well from the proposed spaced interval underlying the area to be spaced is 640 acres.

15. A communitization agreement is currently being prepared for approval by the Bureau of Land Management and Bureau of Indian Affairs to authorize the pooling of the leases for common development.

16. The establishment of a drilling unit on the spaced interval will prevent waste, avoid the drilling of unnecessary wells, provide for the operation and development of the spaced interval in such a manner that a greater ultimate recovery of oil may be obtained, and provide for the protection of correlative rights of all parties owning an interest in the proposed drilling unit.

CONCLUSIONS OF LAW

1. Due and regular notice of the time, place and purpose of the August 24, 1989 hearing was given to all interested parties in the form and manner and within the time required by law.

2. The Board has jurisdiction over all matters covered by the Request for Agency Action and over all parties interested therein and has power and authority to make and promulgate the order herein set forth.

3. The 640-acre tract to be spaced is part of the Wasatch-Mesa Verde formations. The interval spaced in this matter is a highly complex series of isolated and discontinuous beds of productive rock randomly distributed vertically over a several thousand foot thick interval.

4. The establishment of a drilling unit on the spaced interval will prevent waste, avoid the drilling of unnecessary wells, provide for the operation and development of the spaced interval in such a manner that a greater ultimate recovery of oil may be maintained, and provide for the protection of correlative rights of all parties owning an interest in the proposed drilling unit.

ORDER

IT IS THEREFORE-ORDERED THAT:

1. The drilling unit be and is hereby established for the development and production of oil, gas, and associated hydrocarbons from the Wasatch-Mesa Verde formations as defined in paragraph 11 of the Findings of Fact, in its aerial extent as follows:

Township 10 South, Range 20 East, S.L.M.

Section 28: All

(containing 640.0 acres, more or less).

2. The Santa Fe Federal #1-28 Well to be situated in the NW $\frac{1}{4}$ of said Section 28 is to be the unit well.

3. The unit well shall be sited in the W $\frac{1}{2}$ of said section with tolerances for topographic, geological, and other reasons, as allowed by applicable law, said tolerances or exceptions to be granted by administrative action without notice or hearing.

4. The Board retains continuing jurisdictions of all matters covered by this order and over all parties affected thereby.

DATED this ____ day of _____, 1989; but effective as of August 24, 1989.

BOARD OF OIL, GAS AND MINING

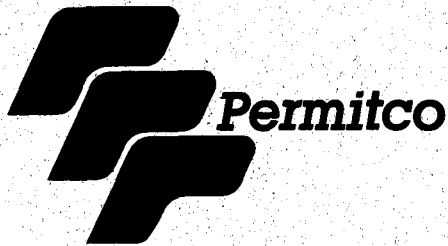
By _____
Gregory P. Williams
Chairman

APPROVED AS TO FORM:

Barbara W. Roberts

Phillip Wm. Lear

8148L
082989



RECEIVED
SEP 18 1989

DIVISION OF
OIL, GAS & MINING

September 13, 1989

State of Utah
Division of Oil, Gas & Mining
3 Triad Center, Suite 350
Salt Lake City, UT 84180-1203

Attn: Lesha

Re: Santa Fe Energy Company
605' FNL and 1615' FWL
NE NW Sec. 28, T10S - R20E
Uintah County, Utah
Hill Creek Fed. 1-28

Dear Lesha,

As per our telephone conversation, I am requesting that you grant an exception to spacing for the above mentioned well.

This location was staked at non-standard spacing due to topography. Santa Fe Energy Company is the lease-holder within a 460 foot radius of the well-bore.

I appreciate your cooperation in this matter. If you should need additional information, please feel free to contact me.

Sincerely,

PERMITCO INC.

Lisa L. Smith
Consultant for
Santa Fe Energy Company

cc: Santa Fe - Tulsa, OK

Permitco Incorporated
A Petroleum Permitting Company

13585 Jackson Drive Denver, Colorado 80241 (303) 452-8888



State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

Norman H. Bangert
Governor

Dee C. Hansen
Executive Director

Dianne R. Nielson, Ph.D.
Division Director

355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203
801-538-5340

September 22, 1989

Santa Fe Energy Company
c/o Permitco Incorporated
13585 Jackson Drive
Denver, Colorado 80241

Gentlemen:

Re: Hill Creek Fed. 1-28 - NE NW Sec. 28, T. 10S, R. 20E - Uintah County, Utah
605' FNL, 1615' FWL

Approval to drill the referenced well is hereby granted in accordance with the Order of Cause No. 197-4 dated August 24, 1989, subject to the following stipulations:

1. Special attention is directed to compliance with Rule R615-3-31, which prescribes drilling procedures for designated oil shale areas.
2. Prior to commencement of drilling, receipt by the Division of evidence providing assurance of an adequate and approved supply of water as required by Chapter 3, Title 73, Utah Code Annotated.

In addition, the following actions are necessary to fully comply with this approval:

1. Spudding notification within 24 hours after drilling operations commence.
2. Submittal of an Entity Action Form within five working days following spudding and whenever a change in operations or interests necessitates an entity status change.
3. Submittal of the Report of Water Encountered During Drilling, Form 7.
4. Prompt notification if it is necessary to plug and abandon the well. Notify John R. Baza, Petroleum Engineer, (Office) (801) 538-5340, (Home) 298-7695, or Jim Thompson, Lead Inspector, (Home) 298-9318.
5. Compliance with the requirements of Rule R615-3-20, Gas Flaring or Venting, Oil and Gas Conservation General Rules.

6. Prior to commencement of the proposed drilling operations, plans for facilities for disposal of sanitary wastes at the drill site shall be submitted to the local health department. These drilling operations and any subsequent well operations must be conducted in accordance with applicable state and local health department regulations. A list of local health departments and copies of applicable regulations are available from the Division of Environmental Health, Bureau of General Sanitation, telephone (801) 538-6121.
7. This approval shall expire one (1) year after date of issuance unless substantial and continuous operation is underway or an application for an extension is made prior to the approval expiration date.

The API number assigned to this well is 43-047-31876.

Sincerely,



R. J. Pirth
Associate Director, Oil & Gas

lcr
Enclosures
cc: Bureau of Land Management
D. R. Nielson
J. L. Thompson
WE14/5-6

APDs Older than One Year BUT Not Reported as Spudded

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OPERATOR: FIRST ZONE PRODUCTION INC CONFIDENTIAL? ()
WELL NAME: FZ 22-2 API NUMBER: 43-019-31283
LEASE TYPE: FED LOCATION: SEC22-T21S-R23E
DATE APPROVED: 01/17/89 APD EXTENDED TO: / /

COMMENTS: _____

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OPERATOR: FIRST ZONE PRODUCTION INC CONFIDENTIAL? ()
WELL NAME: FIRST ZONE 22-3 API NUMBER: 43-019-31284
LEASE TYPE: FED LOCATION: SEC22-T21S-R23E
DATE APPROVED: 01/17/89 APD EXTENDED TO: / /

COMMENTS: _____

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OPERATOR: LAB ENERGY INC CONFIDENTIAL? ()
WELL NAME: LAB ENERGY 17-10 (RE-ENTER) API NUMBER: 43-045-30017
LEASE TYPE: FED LOCATION: SEC17-T07S-R04W
DATE APPROVED: 05/26/87 APD EXTENDED TO: / /

COMMENTS: _____

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OPERATOR: LOMAX EXPLORATION COMPANY CONFIDENTIAL? ()
WELL NAME: MONUMENT FEDERAL 8-35 API NUMBER: 43-013-31263
LEASE TYPE: FED LOCATION: SEC35-T08S-R16E
DATE APPROVED: 02/09/90 APD EXTENDED TO: 02/09/91

COMMENTS: _____

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OPERATOR: SAMEDAN OIL CORPORATION CONFIDENTIAL? ()
WELL NAME: SOUTHMAN CANYON 1-21 API NUMBER: 43-047-31855
LEASE TYPE: FED LOCATION: SEC21-T10S-R23E
DATE APPROVED: 10/03/88 APD EXTENDED TO: 10/03/90

COMMENTS: NO BLM APPROVAL → LA'D 10-18-91 (APD EXPIRED)

=====

Per Margie

OPERATOR: SANTA FE ENERGY COMPANY CONFIDENTIAL? ()
WELL NAME: HILL CREEK FEDERAL 1-28 API NUMBER: 43-047-31876
LEASE TYPE: FED LOCATION: SEC28-T10S-R20E
DATE APPROVED: 09/22/89 APD EXTENDED TO: / /

COMMENTS: NO BLM APPROVAL → LA'D 10-18-91 (APD EXPIRED)

=====

Per Margie

STATE OF UTAH
DIVISION OF OIL, GAS AND MINING
OIL AND GAS INSPECTION RECORD

OPERATOR: SANTA FE ENERGY COMPANY LEASE: U-28203
WELL NAME: HILL CREEK FED. 1-28 API: 43-047-31876
SEC/TWP/RNG: 28 10.0 S 20.0 E CONTRACTOR:
COUNTY: UINTAH FIELD NAME: NATURAL BUTTES

DRILLING/COMPLETION/WORKOVER:

<input type="checkbox"/> APD	<input type="checkbox"/> WELL SIGN	<input type="checkbox"/> HOUSEKEEPING	<input type="checkbox"/> BOPE
<input type="checkbox"/> SAFETY	<input type="checkbox"/> POLLUTION CNTL	<input type="checkbox"/> SURFACE USE	<input type="checkbox"/> PITS
<input type="checkbox"/> OPERATIONS	<input type="checkbox"/> OTHER		

SHUT-IN ☐ / TA ☐:

<input type="checkbox"/> WELL SIGN	<input type="checkbox"/> HOUSEKEEPING	<input type="checkbox"/> EQUIPMENT *	<input type="checkbox"/> SAFETY
<input type="checkbox"/> OTHER			

ABANDONED:

<input type="checkbox"/> MARKER	<input type="checkbox"/> HOUSEKEEPING	<input type="checkbox"/> REHAB	<input type="checkbox"/> Y OTHER
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PRODUCTION:

<input type="checkbox"/> WELL SIGN	<input type="checkbox"/> HOUSEKEEPING	<input type="checkbox"/> EQUIPMENT *	<input type="checkbox"/> FACILITIES *
<input type="checkbox"/> METERING *	<input type="checkbox"/> POLLUTION CNTL	<input type="checkbox"/> PITS	<input type="checkbox"/> DISPOSAL
<input type="checkbox"/> SECURITY	<input type="checkbox"/> SAFETY	<input type="checkbox"/> OTHER	

GAS DISPOSITION:

<input type="checkbox"/> VENTED/FLARED	<input type="checkbox"/> SOLD	<input type="checkbox"/> LEASE USE
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LEGEND: Y = YES/SATISFACTORY N = NO/UNSATISFACTORY A = NOT APPLICABLE

*FACILITIES INSPECTED:

REMARKS:

NO VISIBLE DISTURBANCE NOTICED.

ACTION:

INSPECTOR: CAROL KUBLY

DATE: 09/10/91



State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

Norman H. Bangerter
Governor

Dee C. Hansen
Executive Director

Dianne R. Nielson, Ph.D.
Division Director

355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203
801-538-5340

October 18, 1991

Santa Fe Energy Company
c/o Permitco Incorporated
13585 Jackson Drive
Denver, Colorado 80241

Gentlemen:

Re: Hill Creek Federal 1-28, Sec. 28, T. 10S, R. 20E, Uintah County, Utah
API No. 43-047-31876

Due to excessive time delay in commencing drilling operations, approval to drill the subject well is hereby rescinded, effective immediately.

Please note that a new Application for Permit to Drill must be filed with this office for approval prior to the commencement of any future work on the subject location.

If any previously unreported operations have been performed on this well location, it is imperative that you notify the Division of Oil, Gas and Mining immediately.

Sincerely,

Don Staley
Administrative Supervisor
Oil and Gas

DME/lde
cc: R.J. Firth
Well file
WOI219